



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

A NOTE ON STAR-LORE AMONG THE NAVAJOS.<sup>1</sup>

BY ALFRED M. TOZZER.

A RATHER extraordinary instance of Indian acumen occurred in connection with an observance of the ceremony of the Night Chant among the Navajos which took place some years ago.

The succession of rites in the ceremony occupying nine days and nine nights has been described exhaustively by the late Dr. Washington Matthews in his admirable Memoir, "The Night Chant, a Navajo Ceremony." I shall not therefore go into an account of the several rites occurring on the successive days. It is only with one of these that we are concerned, and even then with only a comparatively insignificant part of this rite, the place in the proceedings where a gourd rattle is manufactured and used to accompany the singing.

I will recall, however, that the celebration of the Night Chant as well as many of the other long ceremonies of the Navajos takes place in the late autumn or the beginning of winter, a season when the snakes are hibernating and other dangerous animals are in hiding and can work no harm. November is a favorite month for the Night Chant to be undertaken, and it was November when the special celebration a portion of which interests us took place.

The three large sand pictures which are made on the last three days need only be mentioned, as it is in connection with these sand mosaics that the gourd rattle was used.

Gourd rattles are by no means uncommon among the Navajos. They are used in connection with all their ceremonies, and are represented in the sand pictures as being carried by the gods. The shamans use them to accompany the chanting, and the masked dancers carry them in their dances. It is not known whether the special rattle in question was used only in connection with a special part of the rite, or whether it occurs in others as well. Dr. Matthews mentions a rattle decorated with evergreen, but he seems not to have seen the perforated rattle.

On the sixth day the first of the dry paintings was begun early in the morning. At the same time the rattle was prepared.

A hollow round gourd was furnished by the shaman from his supply of objects which he had brought with him for use in the different rites. A wooden handle was inserted into the gourd and small stones placed inside. The shaman then perforated the surface of the gourd with several small holes by means of the sharpened end of a bone. He did

<sup>1</sup> Read at the Nineteenth Annual Meeting of the American Folk-Lore Society, Chicago, Ill.

this apparently at random, although, as will presently be seen, the results show that much care must have been taken in locating these holes.

On the lower half of the circular gourd the rude outline of a sheep with large horns was made with the same dot-like holes.

The Bighorn or mountain sheep figures prominently in the myths of the Navajos, and especially in those connected with this ceremony. According to the stories, they are sometimes hunted by the people, but very seldom with success, owing to a trembling seizing the hunter, or to the fact that the arrow refuses to leave the bow-string. These Bighorn sheep are in fact gods called the Bighorn gods or Ganaskidi. They have the power of assuming human form and also of changing people into beings like themselves. These gods are usually represented in the first of the three sand pictures with their horns. This picture is the one in connection with which the rattle was used. It is therefore very natural to find a realistic representation of the sheep upon the rattle.

These gods of the Bighorn sheep are associated with the heavens, being shown in connection with the lightning and the sunbeams. On the walls of their home in the cliff, according to the myth, clouds and lightning are painted. It will presently be seen how these facts furnish a second reason why we should expect to find a sheep represented upon the rattle.

Above the outline of this animal upon the gourd there were two groups of holes. These perforations seemed to have been scattered about quite at random and without any idea of representing a familiar object. In fact it was quite by chance that the relative positions of these holes were noted.

Figs. A and B in the illustration on p. 31 show these two large groups of perforations as they were found upon the rattle.

In talking with the Indians after the special rite was over in which the rattle was used, it was found that these groups of holes represented stars, two of the star gods of the Navajos.

In Fig. A the four stars at the top were explained as the head, and the seven stars situated in a long reversed curve below as the body, of the god of the North.

Passing to Fig. B, the upper group of eight stars and the next lower cluster of four represented, according to the Indian explanation, the feathers attached to the mask of the god as shown in the sand pictures and also seen in the dances when the masks are decorated. The five stars, four of which are in line, under the second group, composed the head of the god. The arms or hands were the two stars widely separated at either side of this head. The three stars in line were, the body, and the two stars separated at the bottom the feet, of the same god. The name of this god was unfortunately not obtained.

With the assistance of Professor W. H. Pickering, I have been able

to identify these stars. There is no doubt as to the ones which are represented on the rattle, as the coincidences are too many between the grouping of the dots upon the gourd and the actual appearance in the heavens to believe that chance enters into the question.

Groups A' and B' are rough copies from Schwieg's "*Tabulæ Cælestes*."

Group A' shows the stars as they appear at midnight in the month of November in the northern sky. It will be remembered that the ceremony is performed usually in this month, and the Navajos identified the stars as representing their god of the North, a most pleasing confirmation of the power of observation possessed by primitive man.

The upper cluster in Fig. A is undoubtedly to be identified as the constellation of Auriga, with Capella, a star of the first magnitude, as the lowest of the four. One of the stars of this constellation is not represented upon the rattle, that drawn with a circle in Fig. A'. The first two stars some distance below are minor ones, which appear, however, as may be seen by comparing Fig. A'. Then follows a curious partial representation of Ursa Major, the Great Bear. The northernmost pointer is omitted and Merak is the only one of the two base stars shown. The stars omitted, on the rattle are shown in Fig. A' by circles. This omission must have been intentional, as the stars left out are as great in magnitude as those represented, and they would naturally attract as much attention as the others. The reason for this selection I am unable to explain.

The three stars composing the handle of the "Dipper" are faithfully shown.

Fig. B' gives the second large group of stars as they actually appear in the heavens, and this we will compare with Fig. B, the grouping on the rattle.

Here again an identification is easy.

The two clusters at the top form a part of the constellation of Taurus. The upper of the two groups of stars of Fig. B is readily recognized as the Pleiades. Here the Indian has added two extra stars. If there had been but one in excess of the six, we could have said that here the Navajo finds the lost Pleiad which was anciently supposed to have disappeared from the group, and which has been celebrated in legend and in song. This addition of the two extra stars, however, in this case was probably due to carelessness in making the perforations.

The second cluster is called the Hyades, a portion of the same constellation of Taurus, with Aldebaran the striking star. Here the holes in the rattle conform with great exactness to the actual grouping. One of the smaller stars is omitted on the rattle.

In the group of five stars composing the head of the Navajo god we actually find five minor stars in much the same general grouping. The

Fig. A



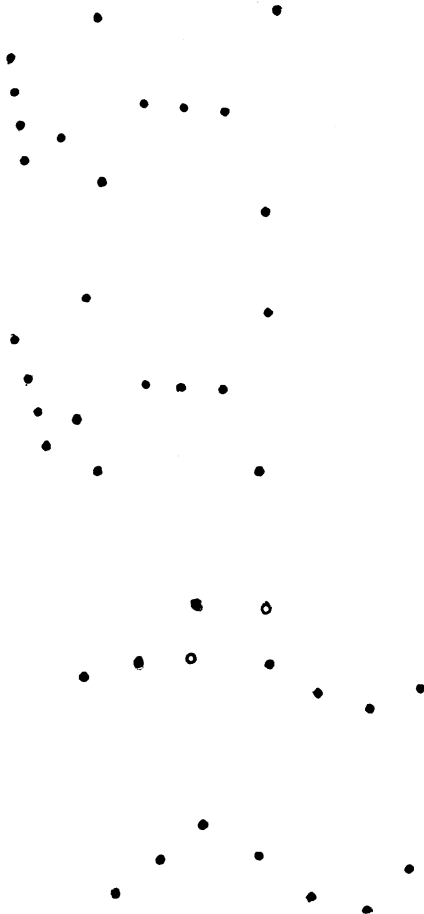
Fig. A



Fig. B



Fig. B



STAR MAPS AND MARKINGS ON RATTLE.

body and the hands and feet of the god are readily recognized as forming the constellation of Orion, with Rigel, the double white star of the first magnitude, as the left hand, the bright red Betelgeuze as the right foot, and the so-called belt of Orion as the body, of the god.

These stars appear in the southeastern sky in the early evening in November. Here again there is accord in regard to the month when the stars are to be seen and the time when the ceremony takes place. We cannot state, however, that these stars represent the Navajo god of the South, as in the former case with the god of the North.

With the single exception of the number of stars in the Pleiades, the Indian grouping, as shown by the holes in the gourd rattle, approaches with remarkable exactness the actual appearance of the heavens of the north and southeast in the month of November.

The keen sense of observation is perhaps what one might expect among the Navajos when he finds it paralleled by a strict and unvarying conformity to tradition in connection with all their religious life.

I have pointed out in a previous paper<sup>1</sup> how the sand pictures of this same people have remained unchanged down to the minutest detail of their complex structure for a score or more of years, although memory alone is the only permanent record of their figures.

HARVARD UNIVERSITY, CAMBRIDGE, MASS.

<sup>1</sup> *Transactions of the Thirteenth International Congress of Americanists*, New York, 1902.